# **Focus Report**

New Chemicals Program PMN Number: P-13-0816

Focus Date: 08/28/2013 11:00:00 PM Report Status: In Progress

Consolidated Set: P-13-0816; P-13-0817; P-13-0818; P-13-0819;

P-13-0820; P-13-0821

Focus Chair: Brian Lee Contractor: Olga Svetlitskaya

I. Notice Information

Submitter:
Chemical Name:
Use:

Other Uses:
PV-Max:
Manufacture:

X

CAS Number:

inhibitor

Import:

**II. SAT Results** 

(1) Health Rating: 1-2 Eco Rating: 3 Comments:

Occupational: 0-1 Non-Occupational: NR Environmental: NR

(1) **PBT:** 1 1 **Comments:** 

Awaiting Human Health Entry Awaiting Human Health Entry Awaiting Human Health Entry

# III. OTHER FACTORS

Categories:

Health Chemical Category: Ecotox SAR and Aliphatic Amines; Aliphatic

TSCA New Amines

Chemical Category:

## Related Cases/Regulatory History:

Health related Cases: Ecotox Related Cases: Regulatory History:

CRSS P2Rec: P2Rec-P2 Recognition; SF-Sustainable Futures; XL-Excellence and Leadership; YX-Exposure-Based

5(e)

MSDS/Label Information:

MSDS: Yes Label: No

General Equipment: General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne

mist and vapor. // Wear safety glasses with side-shields. // When handling this product, the use of chemical gauntlets is recommended. The choice of work glove depends on work conditions and what chemicals are handled. // Wear chemical resistant apron, chemical splash goggles, impervious

gloves and boots. A full slicker suit is recommended if gross exposure is possible.

Respirator: Where concentrations in air may exceed the limits given in this section, the use of air supplied

breathing apparatus is recommended. In event of emergency or planned entry into unknown

concentrations a positive pressure, full-facepiece SCBA should be used.

Health Effects: Eyes: May cause irritation with prolonged contact. // Skin: May cause irritation with prolonged

> contact. Toxic in contact with skin. Methanol may be absorbed through the skin and cause central nervous system effects which may result in permanent visual changes including blindness. Skin contact may aggravate an existing dermatitis condition. // Ingestion: Not a likely route of exposure.

May cause nausea and vomiting. Can cause central nervous system depression. Toxic if

swallowed. Sublethal doses may cause central nervous system effects and may result in permanent

visual changes including blindness. // Inhalation: Toxic by inhalation.

TLV/PEL (PMN or raw

material):

- Methanol (CASRN 67-56-1) - 60 wt% - TWA - ACGIH - Skin - Methanol (CASRN 67-56-1) -60 wt% - STEL - ACGIH - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - NIOSH REL -Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL -NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - OSHA Z1 - Methanol

(CASRN 67-56-1) - 60 wt% - TWA - OSHA Z1

### **Exposure Based Information:**

Exposure Based Review: Exposure Based Review (Eco): Exposure Based Review (Non Occupatuional):

Exposure Based Review (Health): Exposure Based (Occupational): Exposure Based (Environmental):

# IV. Summary of SAT Assessment

# Fate:

**Fate Summary:** P-13-0816-21

FATE: Estimations for example

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 0.50 \text{ (E)}$ log Fish BAF = -0.05 (E)

FATE: Estimations for typical

log Kow = log Koc =

 $\log \text{ Fish BCF} = 1.77 \text{ (E)}$ 

log Fish BAF = 1.51 (E)

PMN Substance:

POTW removal (%) = 90 via sorption and biodeg Time for complete ultimate aerobic biodeg = wk-mo

Sorption to soils/sediments = v.strong

PBT Potential: P1B1

\*CEB FATE: Migration to ground water = negl

#### **Health:**

**Health Summary:** 

Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound.

#### **Ecotox:**

#### **Ecotox Values:**

Fish 96-h LC50: 0.504 or \*(P)Daphnid 48-h LC50: 5.3(P) Green algal 96-h EC50: 0.034(P)Fish Chronic Value: 0.009(P)Daphnid ChV: 0.010(P)Algal ChV: 0.015(P)

Ecotox values comments: Predictions are based on SARs for aliphatic amines with a molecular weight adjustment; SAR

chemical class = aliphatic amines;

; effective concentrations based on 100% active ingredients and mean measured concentrations; DWhardness <150.0 mg/L as CaCO3; and DWTOC <2.0 mg/L;

**Ecotox Factors:** 

Assessment Factor: 10

Concern Concentration:

- Acute Value

Concern Concentration: 1

- Chronic Value

# V. Summary of Exposures/Releases Engineering Summary: P-13-0816

Exposures/Releases	Release	Release	Release
Scenario			
Workers			
Exposure Type			

Engineering Summary:	Release	Release	Release
Exposures/Releases			
Scenario			
Workers			
Exposure Type			

# V. Summary of Exposures/Releases Engineering Summary: P-13-0816

Exposures/Releases	Release	
Scenario		
<u> </u>		
Workers		
Exposure Type		

# VI. Focus Decision and Rationale

D	1 ~ 4 ~	A -4:	
<b>Kegu</b>	latory	Acu	ons

Regulatory Decision: PMN Consent Order Decision Date: 08/28/2013

Type of Decision:

Rationale: P-13-0816 will be regulated under the TSCA 5(e) category (aliphatic amines)

under the exposure-based authority for ecotoxicity and fate concerns.

Human health hazard concerns were low-moderate for inhalation exposures. Potential risks to workers were mitigated by negligible vapor exposures. Ecotoxicity hazard concerns were high based on SAR predictions for aliphatic amines. Potential risks to the environment were low due to no exceedances of the COC during the release period. The required ecotoxicity will be the general test strategy in the NCP Chemical Categories document and will be tiered based on the outcome of the fate testing. The required fate testing will be water solubility, Koc and log kow, all in salt water. The submitter may be asked for effluent measurements from

As of the date these FOCUS notes were finalized EAB has not confirmed the fate testing. The P2REC will not be forwarded based on the high ecotoxicity.

COC: Chronic- 1 ppb, Acute- 9 ppb

Summary of Exposures and Releases

Manu

Dermal: Not required, per SAT

Releases via Incineration:

Proc

Dermal: Not required, per SAT

Releases via Incineration:

Use

Dermal: Not required, per SAT



# P2 Rec Comments:

# **Testing:**

# **Prefocus Recommended:**

Eco: Chronic Base-Set Tests

Species EPA Test Guidance

Fish Early Life-Stage OCSPP 850.1400 concentrations, certificate of analysis

Chronic Daphnia OCSPP 850.1300

concentrations, certificate of analysis
Algae OCSPP 850.4500

protocol review, certificate of analysis

Other parameters

Flow-through method, mean measured

Flow-through method, mean measured

Static, mean measured concentrations,

#### **Final Recommended:**

Health:

Eco:

Fate: Other:

06/08/2015 04:04:48 PM

# **SAT Report**

PMN Number: **P-13-0816** SAT Date: **8/23/2013** Print Date: **6/8/2015** 

# **Related cases:**

Health related cases: Ecotox related cases:

# **Concern levels:**

Type of Concern: <u>Health</u> <u>Eco</u> <u>Comments</u>

Level of Concern: 1-2 3

<b>Persistence</b>	<b>Bioaccum</b>	<b>Toxicity</b>	<b>Comments</b>
1	1	1	
		Awaiting	
		Human Health	
		Entry	
		Awaiting	
		Human Health	
		Entry	
		Awaiting	
		Human Health	
		Entry	

# **Exposure Based Review:**

**Health:** No

Ecotox: Yes Exposure based testing (eco): Chronic Base-Set Tests

Species EPA Test Guidance

Other parameters

Fish Early Life-Stage OCSPP 850.1400
Flow-through method, mean measured concentrations, certificate of analysis
Chronic Daphnia OCSPP 850.1300
Flow-through method, mean measured concentrations, certificate of analysis
Algae OCSPP 850.4500

Static, mean measured concentrations, protocol

review, certificate of analysis

**Routes of exposure:** Health: Inhalation

**Ecotox:** All releases to water

Fate: ;

# **Keywords:**

**Keywords:** 

# **Summary of Assessment:**

Fate:

**Fate Summary:** P-13-0816-21

FATE: Estimations for example

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 0.50 \text{ (E)}$ 

 $\log Fish BAF = -0.05 (E)$ 

FATE: Estimations for typical

log Kow =

log Koc =

log Fish BCF = 1.77 (E)

 $\log$  Fish BAF = 1.51 (E)

PMN Substance:

 $\overline{\text{POTW removal}}$  (%) = 90 via sorption and biodeg

Time for complete ultimate aerobic biodeg = wk-mo

Sorption to soils/sediments = v.strong

PBT Potential: P1B1

\*CEB FATE: Migration to ground water = negl

# **Health:**

**Health Summary:** Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound.

# **Ecotox:**

Test	Test	Test End	Predicted	Measured	Comments
Organism	Type	Point			
fish	96-h	LC50	0.504 or *		
daphnid	48-h	LC50	5.3		
green algal	96-h	EC50	0.034		
fish	_	chronic	0.009		
		value			
daphnid	_	chronic	0.010		
		value			
algal	_	chronic	0.015		
		value			

Sewage Sludge	EC50	-	
Sewage Sludge	Chronic Value	-	

**Ecotox Values Comments:** Predictions are based on SARs for aliphatic amines with a molecular weight adjustment; SAR chemical class = aliphatic amines; effective concentrations based on 100% active ingredients and mean measured concentrations; DWhardness <150.0 mg/L as CaCO3; and DWTOC <2.0 mg/L;

Factors	Values	Comments
Assessment Factor	10	
Concentration of Concern		
(ppb)		
Acute		
Concentration of Concern	1	
(ppb) Chronic		
SARs	Aliphatic Amines	
SAR Class	Aliphatic Amines	
TSCA New Chemcial	Aliphatic Amines	
Category		

# **Ecotox Factors Comments:**

**SAT Chair:** L Keifer 564-8916

Fate assessor: Ecotox assessor: Health assessor:

# **Focus Report**

New Chemicals Program PMN Number: P-13-0817

Focus Date: 08/28/2013 11:00:00 PM Report Status: In Progress

Consolidated Set: P-13-0816; P-13-0817; P-13-0818; P-13-0819;

P-13-0820; P-13-0821

Focus Chair: Brian Lee Contractor: Olga Svetlitskaya

I. Notice Information

Submitter:
Chemical Name:
Use:

Other Uses:
PV-Max:
Manufacture:

X

Import:

**II. SAT Results** 

(1) Health Rating: 1-2 Eco Rating: 3 Comments: ;

Occupational: 0-1 Non-Occupational: NR Environmental: NR

(1) **PBT:** 1 1 **Comments:** 

Awaiting Human Health Entry Awaiting Human Health Entry Awaiting Human Health Entry

# III. OTHER FACTORS

**Categories:** 

Health Chemical Category: Ecotox SAR and Aliphatic Amines; Aliphatic

TSCA New Amines

Chemical Category:

Related Cases/Regulatory History:

Health related Cases: Ecotox Related Cases: Regulatory History:

CRSS P2Rec: P2Rec-P2 Recognition; SF-Sustainable Futures; XL-Excellence and Leadership; YX-Exposure-Based

5(e)

**MSDS/Label Information:** 

MSDS: Yes Label: No

General Equipment: General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne

mist and vapor. // Wear safety glasses with side-shields. // When handling this product, the use of chemical gauntlets is recommended. The choice of work glove depends on work conditions and what chemicals are handled. // Wear chemical resistant apron, chemical splash goggles, impervious

gloves and boots. A full slicker suit is recommended if gross exposure is possible.

Respirator: Where concentrations in air may exceed the limits given in this section, the use of air supplied

breathing apparatus is recommended. In event of emergency or planned entry into unknown

concentrations a positive pressure, full-facepiece SCBA should be used.

Health Effects: Eyes: May cause irritation with prolonged contact. // Skin: May cause irritation with prolonged

contact. Toxic in contact with skin. Methanol may be absorbed through the skin and cause central nervous system effects which may result in permanent visual changes including blindness. Skin contact may aggravate an existing dermatitis condition. // Ingestion: Not a likely route of exposure.

May cause nausea and vomiting. Can cause central nervous system depression. Toxic if

swallowed. Sublethal doses may cause central nervous system effects and may result in permanent

visual changes including blindness. // Inhalation: Toxic by inhalation.

TLV/PEL (PMN or raw

material):

- Methanol (CASRN 67-56-1) - 60 wt% - TWA - ACGIH - Skin - Methanol (CASRN 67-56-1) -60 wt% - STEL - ACGIH - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - NIOSH REL -Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL -NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - OSHA Z1 - Methanol

(CASRN 67-56-1) - 60 wt% - TWA - OSHA Z1

### **Exposure Based Information:**

Exposure Based Review: Exposure Based Review (Eco): Exposure Based Review (Non Occupatuional):

Exposure Based Review (Health): Exposure Based (Occupational): Exposure Based (Environmental):

# IV. Summary of SAT Assessment

# Fate:

**Fate Summary:** P-13-0816-21

FATE: Estimations for example

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 0.50 \text{ (E)}$ 

log Fish BAF = -0.05 (E)

FATE: Estimations for typical

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 1.77 \text{ (E)}$ 

log Fish BAF = 1.51 (E)

PMN Substance:

POTW removal (%) = 90 via sorption and biodeg Time for complete ultimate aerobic biodeg = wk-mo

Sorption to soils/sediments = v.strong

PBT Potential: P1B1

\*CEB FATE: Migration to ground water = negl

#### **Health:**

**Health Summary:** 

Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound. Also concern for respiratory sensitization based on the

#### **Ecotox:**

#### **Ecotox Values:**

Fish 96-h LC50: 0.504 or \*(P)Daphnid 48-h LC50: 5.3(P) Green algal 96-h EC50: 0.034(P)Fish Chronic Value: 0.009(P)Daphnid ChV: 0.010(P)

Algal ChV: 0.015(P)

Ecotox values comments: Predictions are based on SARs for aliphatic amines with a molecular weight adjustment; SAR

chemical class = aliphatic amines;

; effective concentrations based on 100% active ingredients and

mean measured concentrations; DWhardness <150.0 mg/L as CaCO3; and DWTOC <2.0 mg/L;

**Ecotox Factors:** 

Assessment Factor: 10

Concern Concentration:

- Acute Value

Concern Concentration: 1

- Chronic Value

# V. Summary of Exposures/Releases Engineering Summary: P-13-0817

Exposures/Releases	Release	Release	Release
Scenario			
Workers			
Exposure Type			

Engineering Summary:	Release	Release	Release
Exposures/Releases			
Scenario			
Workers			
Exposure Type			

# V. Summary of Exposures/Releases Engineering Summary: P-13-0817

Exposures/Releases	Release	
Scenario		
Workers		
Exposure Type		

# VI. Focus Decision and Rationale

Regu	latory	Action	S
ucsu	iator y	ricuon	u

Regulatory Decision: PMN Consent Order Decision Date: 08/28/2013

Type of Decision:

Rationale: P-13-0817 will be regulated under the TSCA 5(e) category (aliphatic amines)

under the exposure-based authority for ecotoxicity and fate concerns.

Human health hazard concerns were low-moderate for inhalation exposures. Potential risks to workers were mitigated by negligible vapor exposures. Ecotoxicity hazard concerns were high based on SAR predictions for aliphatic amines. Potential risks to the environment were low due to no exceedances of the COC during the release period. The required ecotoxicity will be the general test strategy in the NCP Chemical Categories document and will be tiered based on the outcome of the fate testing. The required fate testing will be water solubility, Koc and log kow, all in salt water. The submitter may be asked for effluent measurements from As of the date these FOCUS notes were finalized EAB has not confirmed the fate testing. The P2REC will not be forwarded based on the high ecotoxicity.

COC: Chronic- 1 ppb, Acute- 9 ppb

Summary of Exposures and Releases

Manu

Dermal: Not required, per SAT

Releases via Incineration:

Proc

Dermal: Not required, per SAT

Releases via Incineration:

Use

Dermal: Not required, per SAT



# P2 Rec Comments:

# **Testing:**

# **Prefocus Recommended:**

Eco: Chronic Base-Set Tests

Species EPA Test Guidance

Fish Early Life-Stage OCSPP 850.1400

concentrations, certificate of analysis Chronic Daphnia OCSPP 850.1300

concentrations, certificate of analysis
Algae OCSPP 850.4500

protocol review, certificate of analysis

Other parameters

Flow-through method, mean measured

Flow-through method, mean measured

Static, mean measured concentrations,

#### **Final Recommended:**

Health:

Eco:

Fate: Other:

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# **SAT Report**

PMN Number: **P-13-0817**SAT Date: **8/23/2013**Print Date: **6/9/2015** 

# **Related cases:**

Health related cases: Ecotox related cases:

# **Concern levels:**

Type of Concern: <u>Health</u> <u>Eco</u> <u>Comments</u>

Level of Concern: 1-2 3

<b>Persistence</b>	<b>Bioaccum</b>	<b>Toxicity</b>	<b>Comments</b>
1	1	1	
		Awaiting	
		Human Health	l
		Entry	
		Awaiting	
		Human Health	l
		Entry	
		Awaiting	
		Human Health	l
		Entry	

# **Exposure Based Review:**

**Health:** No

Ecotox: Yes Exposure based testing (eco): Chronic Base-Set Tests

Species EPA Test Guidance

Other parameters

Fish Early Life-Stage OCSPP 850.1400
Flow-through method, mean measured concentrations, certificate of analysis
Chronic Daphnia OCSPP 850.1300
Flow-through method, mean measured concentrations, certificate of analysis
Algae OCSPP 850.4500

Static, mean measured concentrations, protocol

review, certificate of analysis

**Routes of exposure:** Health: Inhalation

**Ecotox:** All releases to water

Fate: ;

**Keywords:** 

# **Summary of Assessment:**

Fate:

**Fate Summary:** P-13-0816-21

FATE: Estimations for example

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 0.50 \text{ (E)}$ 

 $\log Fish BAF = -0.05 (E)$ 

FATE: Estimations for typical

log Kow =

log Koc =

log Fish BCF = 1.77 (E)

 $\log$  Fish BAF = 1.51 (E)

PMN Substance:

DOTW ramoval (%) - 00 via

 $\overline{\text{POTW removal}}$  (%) = 90 via sorption and biodeg

Time for complete ultimate aerobic biodeg = wk-mo

Sorption to soils/sediments = v.strong

PBT Potential: P1B1

\*CEB FATE: Migration to ground water = negl

# **Health:**

**Health Summary:** Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound. Also concern for respiratory sensitization based on the

# **Ecotox:**

Test	Test	Test End	Predicted	Measured	Comments
Organism	Type	Point			
fish	96-h	LC50	0.504 or *		
daphnid	48-h	LC50	5.3		
green algal	96-h	EC50	0.034		
fish	_	chronic	0.009		
		value			
daphnid	_	chronic	0.010		
		value			
algal	_	chronic	0.015		

		value		
Sewage	3-h	EC50	_	
Sludge				
Sewage	-	Chronic	_	
Sludge		Value		

**Ecotox Values Comments:** Predictions are based on SARs for aliphatic amines with a molecular weight adjustment; SAR chemical class = aliphatic amines;

effective concentrations

based on 100% active ingredients and mean measured concentrations; DWhardness <150.0 mg/L as CaCO3; and DWTOC <2.0 mg/L;

Factors	Values	Comments
Assessment Factor	10	
Concentration of Concern		
(ppb)		
Acute		
Concentration of Concern	1	
(ppb) Chronic		
SARs	Aliphatic Amines	
SAR Class	Aliphatic Amines	
TSCA New Chemcial	Aliphatic Amines	
Category		

# **Ecotox Factors Comments:**

SAT Chair: L Keifer 564-8916

Fate assessor: Ecotox assessor: Health assessor:

# **Focus Report**

New Chemicals Program PMN Number: P-13-0818

Focus Date: 08/28/2013 11:00:00 PM Report Status: In Progress

Consolidated Set: P-13-0816; P-13-0817; P-13-0818; P-13-0819;

P-13-0820; P-13-0821

Focus Chair: Brian Lee Contractor: Olga Svetlitskaya

I. Notice Information

Submitter:
Chemical Name:
Use:

Other Uses:
PV-Max:
Manufacture:
X
Import:

**II. SAT Results** 

(1) Health Rating: 1-2 Eco Rating: 3 Comments: ;

Occupational: 0-1 Non-Occupational: 3 Environmental: 3

(1) **PBT:** 1 2 **Comments:** 

Awaiting Human Health Entry Awaiting Human Health Entry Awaiting Human Health Entry

# III. OTHER FACTORS

Categories:

Health Chemical Category: Ecotox SAR and Aliphatic Amines; Aliphatic

TSCA New Amines

Chemical Category:

Related Cases/Regulatory History:

Health related Cases: Ecotox Related Cases: Regulatory History:

CRSS P2Rec: P2Rec-P2 Recognition; SF-Sustainable Futures; XL-Excellence and Leadership; YX-Exposure-Based

5(e)

MSDS/Label Information:

MSDS: Yes Label: No

General Equipment: General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne

mist and vapor. // Wear safety glasses with side-shields. // When handling this product, the use of chemical gauntlets is recommended. The choice of work glove depends on work conditions and what chemicals are handled. // Wear chemical resistant apron, chemical splash goggles, impervious

gloves and boots. A full slicker suit is recommended if gross exposure is possible.

Respirator: Where concentrations in air may exceed the limits given in this section, the use of air supplied

breathing apparatus is recommended. In event of emergency or planned entry into unknown

concentrations a positive pressure, full-facepiece SCBA should be used.

Health Effects: Eyes: May cause irritation with prolonged contact. // Skin: May cause irritation with prolonged

contact. Toxic in contact with skin. Methanol may be absorbed through the skin and cause central nervous system effects which may result in permanent visual changes including blindness. Skin contact may aggravate an existing dermatitis condition. // Ingestion: Not a likely route of exposure.

May cause nausea and vomiting. Can cause central nervous system depression. Toxic if

swallowed. Sublethal doses may cause central nervous system effects and may result in permanent

visual changes including blindness. // Inhalation: Toxic by inhalation.

TLV/PEL (PMN or raw

material):

- Methanol (CASRN 67-56-1) - 60 wt% - TWA - ACGIH - Skin - Methanol (CASRN 67-56-1) -60 wt% - STEL - ACGIH - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - NIOSH REL -Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL -NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - OSHA Z1 - Methanol

(CASRN 67-56-1) - 60 wt% - TWA - OSHA Z1

### **Exposure Based Information:**

Exposure Based Review: Exposure Based Review (Eco): Exposure Based Review (Non Occupatuional):

Exposure Based Review (Health): Exposure Based (Occupational): Exposure Based (Environmental):

# IV. Summary of SAT Assessment

# Fate:

**Fate Summary:** P-13-0816-21

FATE: Estimations for example

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 0.50 \text{ (E)}$ 

log Fish BAF = -0.05 (E)

FATE: Estimations for

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 1.77 \text{ (E)}$ 

log Fish BAF = 1.51 (E)

PMN Substance:

POTW removal (%) = 90 via sorption and biodeg Time for complete ultimate aerobic biodeg = wk-mo

Sorption to soils/sediments = v.strong PBT Potential: P1B1

\*CEB FATE: Migration to ground water = negl

#### **Health:**

**Health Summary:** 

Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound. Also concern for respiratory sensitization and developmental toxicity based on the potential for

#### **Ecotox:**

#### **Ecotox Values:**

Fish 96-h LC50: 0.504 or \*(P)Daphnid 48-h LC50: 5.3(P) Green algal 96-h EC50: 0.034(P)Fish Chronic Value: 0.009(P)Daphnid ChV: 0.010(P)

Algal ChV: 0.015(P)

Ecotox values comments: Predictions are based on SARs for aliphatic amines with a molecular weight adjustment; SAR

chemical class = aliphatic amines;

; effective concentrations based on 100% active ingredients and

mean measured concentrations; DWhardness <150.0 mg/L as CaCO3; and DWTOC <2.0 mg/L;

**Ecotox Factors:** 

Assessment Factor: 10

Concern Concentration:

- Acute Value

Concern Concentration: 1

- Chronic Value

# V. Summary of Exposures/Releases Engineering Summary: P-13-0818

Exposures/Releases	Release	Release	Release
Scenario			
_			
Workers			
Exposure Type			

Engineering Summary:	Release	Release	Release
Exposures/Releases			
Scenario			
Workers			
Exposure Type			

# V. Summary of Exposures/Releases Engineering Summary: P-13-0818

Exposures/Releases	Release	
Scenario		
Workers		
Exposure Type		

# VI. Focus Decision and Rationale

Regula	tory	Action	S
	Rec	nilatory	Decision

egulatory Decision: PMN Consent Order

Type of Decision:

Rationale:

P-13-0818 will be regulated under the TSCA 5(e) category (aliphatic amines) under the exposure-based authority for ecotoxicity and fate concerns.

Human health hazard concerns were low-moderate for inhalation exposures. Potential risks to workers were mitigated by negligible vapor exposures. Ecotoxicity hazard concerns were high based on SAR predictions for aliphatic amines. Potential risks to the environment were low due to no exceedances of the COC during the release period. The required ecotoxicity will be the general test strategy in the NCP Chemical Categories document and will be tiered based on the outcome of the fate testing. The required fate testing will be water solubility, Koc and log kow, all in salt water. The submitter may be asked for effluent measurements from

As of the date these FOCUS notes were finalized EAB has not confirmed the fate testing. The P2REC will not be forwarded based on the high ecotoxicity.

Decision Date: 08/28/2013

COC: Chronic- 1 ppb, Acute- 9 ppb

Summary of Exposures and Releases

Manu

Dermal: Not required, per SAT

Releases via Incineration:

Dermal: Not required, per SAT

Releases via Incineration:

Fate Releases to Air:

Stack Air: LADD: 1.50E-03 mg/kg/day, ADR: 3.40E-01 mg/kg/day

Use

Dermal: Not required, per SAT

Releases to Water:

Fate Releases to Air:

Stack Air: LADD: 1.62E-03 mg/kg/day

P2 Rec Comments:

**Testing:** 

**Prefocus Recommended:** 

Eco: Chronic Base-Set Tests

Species EPA Test Guidance Fish Early Life-Stage OCSPP 850.1400

concentrations, certificate of analysis

Chronic Daphnia OCSPP 850.1300 concentrations, certificate of analysis

Algae OCSPP 850.4500

protocol review, certificate of analysis

Other parameters

Flow-through method, mean measured

Flow-through method, mean measured

Static, mean measured concentrations,

#### **Final Recommended:**

Health:

Eco:

Fate:

Other:

06/09/2015 02:59:42 P

# **SAT Report**

PMN Number: **P-13-0818**SAT Date: **8/23/2013**Print Date: **6/9/2015** 

# **Related cases:**

Health related cases: Ecotox related cases:

# **Concern levels:**

Type of Concern: <u>Health</u> <u>Eco</u> <u>Comments</u>

Level of Concern: 1-2 3

<b>Persistence</b>	<b>Bioaccum</b>	<b>Toxicity</b>	<b>Comments</b>
1	1	2	
		Awaiting	
		Human Health	
		Entry	
		Awaiting	
		Human Health	
		Entry	
		Awaiting	
		Human Health	
		Entry	

# **Exposure Based Review:**

**Health:** No

Ecotox: Yes Exposure based testing (eco): Chronic Base-Set Tests

Species EPA Test Guidance

Other parameters

Fish Early Life-Stage OCSPP 850.1400
Flow-through method, mean measured concentrations, certificate of analysis
Chronic Daphnia OCSPP 850.1300
Flow-through method, mean measured concentrations, certificate of analysis
Algae OCSPP 850.4500

Static, mean measured concentrations, protocol

review, certificate of analysis

**Routes of exposure:** Health: Inhalation

**Ecotox:** All releases to water

Fate: ;

# **Keywords:**

**Keywords:** 

# **Summary of Assessment:**

Fate:

**Fate Summary:** P-13-0816-21

FATE: Estimations for example

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 0.50 \text{ (E)}$ 

log Fish BAF = -0.05 (E)

FATE: Estimations for typical

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 1.77 \text{ (E)}$ 

 $\log \text{ Fish BAF} = 1.51 \text{ (E)}$ 

PMN Substance:

POTW removal (%) = 90 via sor

 $\overline{\text{POTW removal}}$  (%) = 90 via sorption and biodeg

Time for complete ultimate aerobic biodeg = wk-mo

Sorption to soils/sediments = v.strong

PBT Potential: P1B1

\*CEB FATE: Migration to ground water = negl

# Health:

Health Summary: Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound. Also concern for respiratory sensitization and developmental toxicity based on the potential for

# **Ecotox:**

Test	Test	<b>Test End</b>	Predicted	Measured	Comments
Organism	Type	Point			
fish	96-h	LC50	0.504 or *		
daphnid	48-h	LC50	5.3		
green algal	96-h	EC50	0.034		
fish	_	chronic	0.009		
		value			
daphnid	_	chronic	0.010		
		value			

algal	_	chronic value	0.015	
Sewage Sludge		EC50	_	
Sewage Sludge		Chronic Value	_	

Ecotox Values Comments: Predictions are based on SARs for aliphatic amines with a molecular weight adjustment; SAR chemical class = aliphatic amines; ; effective concentrations based on 100% active ingredients and mean measured concentrations; DWhardness <150.0 mg/L as CaCO3; and DWTOC <2.0 mg/L;

Factors	Values	Comments
Assessment Factor	10	
Concentration of Concern		
(ppb)		
Acute		
Concentration of Concern	1	
(ppb) Chronic		
SARs	Aliphatic Amines	
SAR Class	Aliphatic Amines	
TSCA New Chemcial	Aliphatic Amines	
Category		

# **Ecotox Factors Comments:**

**SAT Chair:** L Keifer 564-8916

Fate assessor: Ecotox assessor: Health assessor:

# **Briefing Paper**

Case Number: P-13-0819

## Part I: Background Data

Program Manager: Jeff Bauer

Review Team:

Meeting Date:

Day In Process: 50

Day 90: 11/04/2013

A. CBI Claims:

B. Submitter:

C. Chemical Identity:

D. Chemical Class:

Ecotox: Aliphatic Amines; Aliphatic Amines

E. Structure:

F. Physical/Chemical properties:



G. Volume:

H. Use:



Technical Integrator:

- I. Test Data Submitted:
- J. MSDS:

ISDS: Yes Label: No

General equipment: General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne mist and vapor. // Wear safety glasses with side-shields. // When handling this product, the use of chemical gauntlets is recommended. The choice of work glove depends on work conditions and what chemicals are handled. // Wear chemical resistant apron, chemical splash goggles, impervious gloves and boots. A full slicker suit is recommended if gross exposure is possible.

Respirator: Where concentrations in air may exceed the limits given in this section, the use of air supplied breathing apparatus is recommended. In event of emergency or planned entry into unknown

concentrations a positive pressure, full-facepiece SCBA should be used.

Health Effects: Eyes: May cause irritation with prolonged contact. // Skin: May cause irritation with prolonged contact. Toxic in contact with skin. Methanol may be absorbed through the skin and cause central nervous system effects which may result in permanent visual changes including

blindness. Skin contact may aggravate an existing dermatitis condition. // Ingestion: Not a likely route of exposure. May cause nausea and vomiting. Can cause central nervous system depression. Toxic if swallowed. Sublethal doses may cause central nervous system effects and may result in permanent visual changes including blindness. // Inhalation: Toxic by inhalation.

may result in permanent visual changes including blindness. // Inhalation: Toxic by inhalation. K. SAT Ratings: Human Health: **Environment:** L. Focus Results: P-13-0819 will be regulated under the TSCA 5(e) category (aliphatic amines) under the exposure-based authority for ecotoxicity and fate concerns. Human health hazard concerns were low-moderate for inhalation exposures. Potential risks to workers were mitigated by negligible vapor exposures. Ecotoxicity hazard concerns were high based on SAR predictions for aliphatic amines. Potential risks to the environment were low due to no exceedances of the COC during the release period. The required ecotoxicity will be the general test strategy in the NCP Chemical Categories document and will be tiered based on the outcome of the fate testing. The required fate testing will be water solubility, Koc and log kow, all in salt water. The submitter may be asked for effluent . As of the date these FOCUS notes were finalized EAB has not measurements from confirmed the fate testing. The P2REC will not be forwarded based on the high ecotoxicity. COC: Chronic- 1 ppb, Acute- 9 ppb Summary of Exposures and Releases Manu Dermal: Not required, per SAT Releases via Incineration: Proc Dermal: Not required, per SAT Releases via Incineration: Use Dermal: Not required, per SAT Releases to Water:

# Part II: New Information

## Part III: Recommendation and Rationale

5(e) SNUR for a water trigger of 1 ppb. The chronic COC for all 12 cases is 1 ppb but the acute COC varies slightly

The Program Manager recommends the PMN be dropped from further review with a Non 5(e) SNUR with a water trigger of 1 ppb. The testing in the SNUR will bel:

Tier A: Water solubility test, log Kow, and log Koc in representative salt water conditions with the PMN

Based on EPA's review of the results of these studies, EPA will either choose:

Tier B1: OPPTS 850.1075 (Marine acute fish toxicity test), OPPTS 850.1035 (Mysid acute toxicity test), and OCSPP 850.4500 (Marine algal toxicity test) OR

Tier B2: OPPTS 850.1740 (Whole sediment acute toxicity invertebrates, marine)

# Part IV: Risk Summary

## A. Health Effects:

Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound.

#### B. Environmental Effects:

Ecotox: predicted (P) and measured (M) toxicity value is mg/L (ppm) are:

Fish 96-h LC50: 0.504 or \*(P)
Daphnid 48-h LC50: 5.3(P)
Green algal 96-h EC50: 0.034(P)
Fish Chronic Value: 0.009(P)
Daphnid ChV: 0.010(P)
Algal ChV: 0.015(P)

#### C. Environmental Releases and Exposures:

# D. Risk Estimates:

# Part V: Exposure Criteria Met Exposure Based Review (Chemistry): Exposure Based Review (Health): Exposure Based Review (Ecotox): Exposure Based Review (Occupational): Exposure Based Review (Non-Occupational) Exposure Based Review (Environmental):

Exposure Farameter Exposure-based Fersistent/Bloaccum Exposure value	<b>Exposure Parameter</b>	Exposure-Based	Persistent/Bioaccum	Exposure Value
--	---------------------------	----------------	---------------------	----------------

Surface DW:	O Yes O No	○ Yes ○ No			
Fish Ingestion:	○ Yes ○ No	○ Yes ○ No			
Ground DW:	○ Yes ○ No	○ Yes ○ No			
Inhalation:	O Yes O No	O Yes O No			
Water Releases:	○ Yes ○ No	○ Yes ○ No			
Total Releases:	○ Yes ○ No	○ Yes ○ No			
Consumer Exposure:	○ Yes ○ No	○ Yes ○ No			
Part VI: Tests  Final Testing Recommendat Health: Eco:	tion				
Fate: Other:					
Comments:					
Part VII: Other Factor	'S				
A. Substitutes:					
B. Benefits:					
C. Other Uses:					
D. Other:					
Part VIII: Regulatory l	History				
Comments:					
				_	
Last Updated by					
	De	ocument Created by Jeff Bauer or	n 09/25/2013		

# **Focus Report**

New Chemicals Program PMN Number: P-13-0819

Focus Date: 08/28/2013 11:00:00 PM Report Status: In Progress

Consolidated Set: P-13-0816; P-13-0817; P-13-0818; P-13-0819;

P-13-0820; P-13-0821

Focus Chair: Brian Lee Contractor: Olga Svetlitskaya

I. Notice Information

Submitter:
Chemical Name:
Use:

Other Uses:
PV-Max:
Manufacture:

X

Import:

**II. SAT Results** 

(1) Health Rating: 1-2 Eco Rating: 3 Comments: ;

Occupational: 0-1 Non-Occupational: NR Environmental: NR

(1) **PBT:** 1 1 **Comments:** 

Awaiting Human Health Entry Awaiting Human Health Entry Awaiting Human Health Entry

# III. OTHER FACTORS

**Categories:** 

Health Chemical Category: Ecotox SAR and Aliphatic Amines; Aliphatic

TSCA New Amines

Chemical Category:

## Related Cases/Regulatory History:

Health related Cases: Ecotox Related Cases: Regulatory History:

CRSS P2Rec: P2Rec-P2 Recognition; SF-Sustainable Futures; XL-Excellence and Leadership; YX-Exposure-Based

5(e)

**MSDS/Label Information:** 

MSDS: Yes Label: No

General Equipment: General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne

mist and vapor. // Wear safety glasses with side-shields. // When handling this product, the use of chemical gauntlets is recommended. The choice of work glove depends on work conditions and what chemicals are handled. // Wear chemical resistant apron, chemical splash goggles, impervious

gloves and boots. A full slicker suit is recommended if gross exposure is possible.

Respirator: Where concentrations in air may exceed the limits given in this section, the use of air supplied

breathing apparatus is recommended. In event of emergency or planned entry into unknown

concentrations a positive pressure, full-facepiece SCBA should be used.

Health Effects: Eyes: May cause irritation with prolonged contact. // Skin: May cause irritation with prolonged

contact. Toxic in contact with skin. Methanol may be absorbed through the skin and cause central nervous system effects which may result in permanent visual changes including blindness. Skin contact may aggravate an existing dermatitis condition. // Ingestion: Not a likely route of exposure.

May cause nausea and vomiting. Can cause central nervous system depression. Toxic if

swallowed. Sublethal doses may cause central nervous system effects and may result in permanent

visual changes including blindness. // Inhalation: Toxic by inhalation.

TLV/PEL (PMN or raw

material):

- Methanol (CASRN 67-56-1) - 60 wt% - TWA - ACGIH - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL - ACGIH - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - OSHA Z1 - Methanol

(CASRN 67-56-1) - 60 wt% - TWA - OSHA Z1

### **Exposure Based Information:**

Exposure Based Review:
Exposure Based Review (Eco):
Exposure Based Review
(Non Occupatuional):

Exposure Based Review (Health): Exposure Based (Occupational): Exposure Based (Environmental):

# **IV.** Summary of SAT Assessment

# Fate:

**Fate Summary:** P-13-0816-21

FATE: Estimations for example

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 0.50 \text{ (E)}$ 

 $\log \text{ Fish BAF} = -0.05 \text{ (E)}$ 

FATE: Estimations for typical

log Kow =

log Koc =

log Fish B $\overline{CF} = 1.77$  (E)

 $\log \text{ Fish BAF} = 1.51 (E)$ 

PMN Substance:

(%) = 90 via sorption and biodeg

Time for complete ultimate aerobic biodeg = wk-mo

Sorption to soils/sediments = v.strong

PBT Potential: P1B1

\*CEB FATE: Migration to ground water = negl

#### **Health:**

**Health Summary:** 

Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound.

#### **Ecotox:**

#### **Ecotox Values:**

Fish 96-h LC50: 0.504 or \*(P)
Daphnid 48-h LC50: 5.3(P)
Green algal 96-h EC50: 0.034(P)
Fish Chronic Value: 0.009(P)
Daphnid ChV: 0.010(P)
Algal ChV: 0.015(P)

Ecotox values comments: Predictions are based on SARs for aliphatic amines with a molecular weight adjustment; SAR

chemical class = aliphatic amines;

effective concentrations based on 100% active ingredients and mean measured concentrations; DWhardness <150.0 mg/L as CaCO3; and DWTOC <2.0 mg/L;

**Ecotox Factors:** 

Assessment Factor: 10

Concern Concentration:

- Acute Value

Concern Concentration: 1

- Chronic Value

Exposures/Releases	Release	Release	Release
Scenario			
Workers			
Exposure Type			

Engineering Summary:	Release	Release	Release
Exposures/Releases			
Scenario			
Workers			
Exposure Type			

Exposures/Releases	Release	
Scenario		
Workers		
Exposure Type		

## VI. Focus Decision and Rationale

Regulatory A	Actions
--------------	---------

Regulatory Decision: PMN Consent Order Decision Date: 08/28/2013

Type of Decision:

Rationale: P-13-0819 will be regulated under the TSCA 5(e) category (aliphatic amines)

under the exposure-based authority for ecotoxicity and fate concerns.

Human health hazard concerns were low-moderate for inhalation exposures. Potential risks to workers were mitigated by negligible vapor exposures. Ecotoxicity hazard concerns were high based on SAR predictions for aliphatic amines. Potential risks to the environment were low due to no exceedances of the COC during the release period. The required ecotoxicity will be the general test strategy in the NCP Chemical Categories document and will be tiered based on the outcome of the fate testing. The required fate testing will be water solubility, Koc and log kow, all in salt water. The submitter may be asked for effluent measurements from

As of the date these FOCUS notes were finalized EAB has not confirmed the fate testing. The P2REC will not be forwarded based on the high ecotoxicity.

COC: Chronic- 1 ppb, Acute- 9 ppb

Summary of Exposures and Releases

Dermal: Not required, per SAT

Manu

Dermal: Not required, per SAT

Releases via Incineration:

Proc

Dermal: Not required, per SAT

Releases via Incineration:

Use

Releases to Water:

## P2 Rec Comments:

## **Testing:**

## **Prefocus Recommended:**

Eco: Chronic Base-Set Tests

Species EPA Test Guidance

Fish Early Life-Stage OCSPP 850.1400 concentrations, certificate of analysis

Chronic Daphnia OCSPP 850.1300

concentrations, certificate of analysis
Algae OCSPP 850.4500

protocol review, certificate of analysis

Other parameters

Flow-through method, mean measured

Flow-through method, mean measured

Static, mean measured concentrations,

#### **Final Recommended:**

Health:

Eco:

Fate: Other:

06/09/2015 03:18:39 PM

# **SAT Report**

PMN Number: **P-13-0819** SAT Date: **8/23/2013** Print Date: **6/9/2015** 

## **Related cases:**

Health related cases: Ecotox related cases:

## **Concern levels:**

Type of Concern: <u>Health</u> <u>Eco</u> <u>Comments</u>

Level of Concern: 1-2 3

<b>Persistence</b>	<b>Bioaccum</b>	<b>Toxicity</b>	<b>Comments</b>
1	1	1	
		Awaiting	
		Human Health	
		Entry	
		Awaiting	
		Human Health	
		Entry	
		Awaiting	
		Human Health	
		Entry	

## **Exposure Based Review:**

**Health:** No

Ecotox: Yes Exposure based testing (eco): Chronic Base-Set Tests

Species EPA Test Guidance

Other parameters

Fish Early Life-Stage OCSPP 850.1400
Flow-through method, mean measured concentrations, certificate of analysis
Chronic Daphnia OCSPP 850.1300
Flow-through method, mean measured concentrations, certificate of analysis
Algae OCSPP 850.4500

Static, mean measured concentrations, protocol

review, certificate of analysis

**Routes of exposure:** Health: Inhalation

**Ecotox:** All releases to water

Fate: ;

## **Keywords:**

**Keywords:** 

## **Summary of Assessment:**

Fate:

**Fate Summary:** P-13-0816-21

FATE: Estimations for example

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 0.50 \text{ (E)}$ 

 $\log Fish BAF = -0.05 (E)$ 

FATE: Estimations for typical

log Kow =

log Koc =

log Fish BCF = 1.77 (E)

 $\log$  Fish BAF = 1.51 (E)

PMN Substance:

 $\overline{\text{POTW removal}}$  (%) = 90 via sorption and biodeg

Time for complete ultimate aerobic biodeg = wk-mo

Sorption to soils/sediments = v.strong

PBT Potential: P1B1

\*CEB FATE: Migration to ground water = negl

## **Health:**

**Health Summary:** Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound.

## **Ecotox:**

Test	Test	Test End	Predicted	Measured	Comments
Organism	Type	Point			
fish	96-h	LC50	0.504 or *		
daphnid	48-h	LC50	5.3		
green algal	96-h	EC50	0.034		
fish	_	chronic	0.009		
		value			
daphnid	_	chronic	0.010		
		value			
algal	_	chronic	0.015		
		value			

Sewage Sludge	EC50	_	
Sewage Sludge	Chronic Value	-	

**Ecotox Values Comments:** Predictions are based on SARs for aliphatic amines with a molecular weight adjustment; SAR chemical class = aliphatic amines; ; effective concentrations

based on 100% active ingredients and mean measured concentrations; DWhardness <150.0 mg/L as CaCO3; and DWTOC <2.0 mg/L;

Factors	Values	Comments
Assessment Factor	10	
Concentration of Concern		
(ppb)		
Acute		
Concentration of Concern	1	
(ppb) Chronic		
SARs	Aliphatic Amines	
SAR Class	Aliphatic Amines	
TSCA New Chemcial	Aliphatic Amines	
Category		

## **Ecotox Factors Comments:**

**SAT Chair:** L Keifer 564-8916

Fate assessor: Ecotox assessor: Health assessor:

# **Focus Report**

New Chemicals Program PMN Number: P-13-0820

Focus Date: 08/28/2013 11:00:00 PM Report Status: In Progress

Consolidated Set: P-13-0816; P-13-0817; P-13-0818; P-13-0819;

P-13-0820; P-13-0821

Focus Chair: Brian Lee Contractor: Olga Svetlitskaya

I. Notice Information

Submitter:
Chemical Name:
Use:

Other Uses:
PV-Max:
Manufacture:
X
Import:

**II. SAT Results** 

(1) Health Rating: 1-2 Eco Rating: 3 Comments: ;

Occupational: 0-1 Non-Occupational: NR Environmental: NR

(1) **PBT:** 1 1 **Comments:** 

Awaiting Human Health Entry Awaiting Human Health Entry Awaiting Human Health Entry

## III. OTHER FACTORS

Categories:

Health Chemical Category: Ecotox SAR and Aliphatic Amines; Aliphatic

TSCA New Amines

Chemical Category:

Related Cases/Regulatory History:

Health related Cases: Ecotox Related Cases: Regulatory History:

CRSS P2Rec: P2Rec-P2 Recognition; SF-Sustainable Futures; XL-Excellence and Leadership; YX-Exposure-Based

5(e)

MSDS/Label Information:

MSDS: Yes Label: No

General Equipment: General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne

mist and vapor. // Wear safety glasses with side-shields. // When handling this product, the use of chemical gauntlets is recommended. The choice of work glove depends on work conditions and what chemicals are handled. // Wear chemical resistant apron, chemical splash goggles, impervious

gloves and boots. A full slicker suit is recommended if gross exposure is possible.

Respirator: Where concentrations in air may exceed the limits given in this section, the use of air supplied

breathing apparatus is recommended. In event of emergency or planned entry into unknown

concentrations a positive pressure, full-facepiece SCBA should be used.

Health Effects: Eyes: May cause irritation with prolonged contact. // Skin: May cause irritation with prolonged

> contact. Toxic in contact with skin. Methanol may be absorbed through the skin and cause central nervous system effects which may result in permanent visual changes including blindness. Skin contact may aggravate an existing dermatitis condition. // Ingestion: Not a likely route of exposure.

May cause nausea and vomiting. Can cause central nervous system depression. Toxic if

swallowed. Sublethal doses may cause central nervous system effects and may result in permanent

visual changes including blindness. // Inhalation: Toxic by inhalation.

TLV/PEL (PMN or raw

material):

- Methanol (CASRN 67-56-1) - 60 wt% - TWA - ACGIH - Skin - Methanol (CASRN 67-56-1) -60 wt% - STEL - ACGIH - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - NIOSH REL -Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL - NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - STEL -NIOSH REL - Skin - Methanol (CASRN 67-56-1) - 60 wt% - TWA - OSHA Z1 - Methanol

(CASRN 67-56-1) - 60 wt% - TWA - OSHA Z1

#### **Exposure Based Information:**

Exposure Based Review: Exposure Based Review (Eco): Exposure Based Review (Non Occupatuional):

Exposure Based Review (Health): Exposure Based (Occupational): Exposure Based (Environmental):

## IV. Summary of SAT Assessment

## Fate:

**Fate Summary:** P-13-0816-21

FATE: Estimations for example

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 0.50 \text{ (E)}$ 

log Fish BAF = -0.05 (E)

FATE: Estimations for typical

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 1.77 \text{ (E)}$ 

log Fish BAF = 1.51 (E)

PMN Substance:

POTW removal (%) = 90 via sorption and biodeg Time for complete ultimate aerobic biodeg = wk-mo

Sorption to soils/sediments = v.strong

PBT Potential: P1B1

\*CEB FATE: Migration to ground water = negl

#### **Health:**

**Health Summary:** 

Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound. Also concern for respiratory sensitization based on

#### **Ecotox:**

#### **Ecotox Values:**

Fish 96-h LC50: 0.504 or \*(P)Daphnid 48-h LC50: 5.3(P) Green algal 96-h EC50: 0.034(P)Fish Chronic Value: 0.009(P)Daphnid ChV: 0.010(P)

Algal ChV: 0.015(P)

Ecotox values comments: Predictions are based on SARs for aliphatic amines with a molecular weight adjustment; SAR

chemical class = aliphatic amines;

effective concentrations based on 100% active ingredients and

mean measured concentrations; DWhardness <150.0 mg/L as CaCO3; and DWTOC <2.0 mg/L;

**Ecotox Factors:** 

Assessment Factor: 10

Concern Concentration:

- Acute Value

Concern Concentration: 1

- Chronic Value

Exposures/Releases	Release	Release	Release
Scenario			
Workers			
Exposure Type			

Engineering Summary: Exposures/Releases	Release	Release	Release
Scenario			
Workers			
Exposure Type			

Exposures/Releases	Release	
Scenario		
Workers		
Exposure Type		

## VI. Focus Decision and Rationale

Regn	latory	Acti	ons
ncgu	iaiui y	Atu	OH

Regulatory Decision: PMN Consent Order Decision Date: 08/28/2013

Type of Decision:

Rationale: P-13-0820 will be regulated under the TSCA 5(e) category (aliphatic amines)

under the exposure-based authority for ecotoxicity and fate concerns.

Human health hazard concerns were low-moderate for inhalation exposures. Potential risks to workers were mitigated by negligible vapor exposures. Ecotoxicity hazard concerns were high based on SAR predictions for aliphatic amines. Potential risks to the environment were low due to no exceedances of the COC during the release period. The required ecotoxicity will be the general test strategy in the NCP Chemical Categories document and will be tiered based on the outcome of the fate testing. The required fate testing will be water solubility, Koc and log kow, all in salt water. The submitter may be asked for effluent measurements

As of the date these FOCUS notes were finalized EAB has not confirmed the fate testing. The P2REC will not be forwarded based on the high ecotoxicity.

COC: Chronic- 1 ppb, Acute- 9 ppb

Summary of Exposures and Releases

Manu
Dermal: Not required, per SAT
Releases via Incineration:
Proc
Dermal: Not required, per SAT
Releases via Incineration:

Dermal: Not required, per SAT

Use

Releases to Water:

## P2 Rec Comments:

## **Testing:**

## **Prefocus Recommended:**

Eco: Chronic Base-Set Tests

Species EPA Test Guidance

Fish Early Life-Stage OCSPP 850.1400

concentrations, certificate of analysis Chronic Daphnia OCSPP 850.1300

concentrations, certificate of analysis
Algae OCSPP 850.4500

protocol review, certificate of analysis

Other parameters

Flow-through method, mean measured

Flow-through method, mean measured

Static, mean measured concentrations,

#### **Final Recommended:**

Health:

Eco:

Fate: Other:

06/09/2015 03:26:29 PM

## **SAT Report**

PMN Number: **P-13-0820** SAT Date: **8/23/2013** Print Date: **6/9/2015** 

## **Related cases:**

Health related cases: Ecotox related cases:

## **Concern levels:**

Type of Concern: <u>Health</u> <u>Eco</u> <u>Comments</u>

Level of Concern: 1-2 3

<b>Persistence</b>	<b>Bioaccum</b>	<b>Toxicity</b>	<b>Comments</b>
1	1	1	
		Awaiting	
		Human Health	
		Entry	
		Awaiting	
		Human Health	
		Entry	
		Awaiting	
		Human Health	
		Entry	

## **Exposure Based Review:**

**Health:** No

Ecotox: Yes Exposure based testing (eco): Chronic Base-Set Tests

Species EPA Test Guidance

Other parameters

Fish Early Life-Stage OCSPP 850.1400
Flow-through method, mean measured concentrations, certificate of analysis
Chronic Daphnia OCSPP 850.1300
Flow-through method, mean measured concentrations, certificate of analysis
Algae OCSPP 850.4500

Static, mean measured concentrations, protocol

review, certificate of analysis

**Routes of exposure:** Health: Inhalation

**Ecotox:** All releases to water

Fate: ;

Kev	wor	ds
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**Keywords:** 

## **Summary of Assessment:**

Fate:

**Fate Summary:** P-13-0816-21

FATE: Estimations for example

log Kow =

log Koc =

 $\log \text{ Fish BCF} = 0.50 \text{ (E)}$ 

 $\log Fish BAF = -0.05 (E)$ 

FATE: Estimations for typical

log Kow =

 $\log Koc =$ 

log Fish BCF = 1.77 (E)

 $\log$  Fish BAF = 1.51 (E)

PMN Substance:

 $\overrightarrow{POTW}$  removal (%) = 90 via sorption and biodeg

Time for complete ultimate aerobic biodeg = wk-mo

Sorption to soils/sediments = v.strong

PBT Potential: P1B1

\*CEB FATE: Migration to ground water = negl

## **Health:**

**Health Summary:** Not absorbed through the skin, poor absorption from the GI tract; moderate absorption from the lung (analog). Concern for surfactant effects on the lung; irritation to eye, mucous membranes and lung based on surfactant properties of the compound.

Also concern for respiratory sensitization based on

## **Ecotox:**

Test	Test	Test End	Predicted	Measured	Comments
Organism	Type	Point			
fish	96-h	LC50	0.504 or *		
daphnid	48-h	LC50	5.3		
green algal	96-h	EC50	0.034		
fish	_	chronic	0.009		
		value			
daphnid	_	chronic	0.010		
		value			
algal	_	chronic	0.015		

		value		
Sewage	3-h	EC50	_	
Sludge				
Sewage	1	Chronic	_	
Sludge		Value		

**Ecotox Values Comments:** Predictions are based on SARs for aliphatic amines with a molecular weight adjustment; SAR chemical class = aliphatic amines;

effective concentrations

based on 100% active ingredients and mean measured concentrations; DWhardness <150.0 mg/L as CaCO3; and DWTOC <2.0 mg/L;

Factors	Values	Comments
Assessment Factor	10	
Concentration of Concern		
(ppb)		
Acute		
Concentration of Concern	1	
(ppb) Chronic		
SARs	Aliphatic Amines	
SAR Class	Aliphatic Amines	
TSCA New Chemcial	Aliphatic Amines	
Category		

## **Ecotox Factors Comments:**

SAT Chair: L Keifer 564-8916

Fate assessor: Ecotox assessor: Health assessor: